Figure 1A

Murine Soluble RAGE_FC

```
   1  ATGCCAGCGG GGACAGCAGC TAGAGCCTGG GTGCTGGTTC TTGCTCTATG
  51  GGGAGCTGTA GCTGGTGGTC AGAACATCAC AGCCCGGATT GGAGAGCCAC
 101  TTGTGCTAAG CTGTAAGGGG GCCCCTAAGA AGCCGCCCCA GCAGCTAGAA
 151  TGGAAACTGA ACACAGGAAG AACTGAAGCT TGGAAGGTCC TCTCTCCCCA
 201  GGGAGGCCCC TGGGACAGCG TGGCTCAAAT CCTCCCCAAT GGTTCCCTCC
 251  TCCTTCCAGC CACTGGAATT GTCGATGAGG GGACGTTCCG GTGTCGGGCA
 301  ACTAACAGGC GAGGGAAGGA GGTCAAGTCC AACTACCGAG TCCGAGTCTA
 351  CCAGATTCCT GGGAAGCCAG AAATTGTGGA TCCTGCCTCT GAACTCACAG
 401  CCAGTGTCCC TAATAAGGTG GGGACATGTG TGTCTGAGGG AAGCTACCCT
 451  GCAGGGACCC TTAGCTGGCA CTTAGATGGG AAACTTCTGA TTCCCGATGG
 501  CAAAGAAACA CTCGTGAAGG AAGAGACCAG GAGACACCCT GAGACGGGAC
 551  TCTTTACACT GCGGTCAGAG CTGACAGTGA TCCCCACCCA AGGAGGAACC
 601  ACCCATCCTA CCTTCTCCTG CAGTTTCAGC CTGGGCCTTC CCCGGCGCAG
 651  ACCCCTGAAC ACAGCCCCTA TCCAACTCCG AGTCAGGGAG CCTGGGCCTC
 701  CAGAGGGCAT TCAGCTGTTG GTTGAGCCTG AAGGTGGAAT AGTCGCTCCT
 751  GGTGGGACTG TGACCTTGAC CTGTGCCATC TCTGCCCAGC CCCCTCCTCA
 801  GGTCCACTGG ATAAAGGATG GTGCACCCTT GCCCCTGGCT CCCAGCCCTG
 851  TGCTGCTCCT CCCTGAGGTG GGGCACGCGG ATGAGGGCAC CTATAGCTGC
 901  GTGGCCACCC ACCCTAGCCA CGGACCTCAG GAAAGCCCTC CTGTCAGCAT
 951  CAGGGTCACA GAAACCGGCG ATGAGGGGCC AGCTGAAGGC TCTGTGGGTG
1001  AGTCTGGGCT GGGTACGCTA GCCCTGGCCG AGCCCCGCGG ACCGACAATC
1051  AAGCCCTGTC CTCCATGCAA ATGCCCAGGT AAGTCACTAG ACCAGAGCTC
```

Figure 1A Continued.

1101 CACTCCCGGG AGAATGGTAA GTGCTATAAA CATCCCTGCA CTAGAGGATA

1151 AGCCATGTAC AGATCCATTT CCATCTCTCC TCATCAGCAC CTAACCTCGA

1201 GGGTGGACCA TCCGTCTTCA TCTTCCCTCC AAAGATCAAG GATGTACTCA

1251 TGATCTCCCT GAGCCCCATA GTCACATGTG TGGTGGTGGA TGTGAGCGAG

1301 GATGACCCAG ATGTCCAGAT CAGCTGGTTT GTGAACAACG TGGAAGTACA

1351 CACAGCTCAG ACACAAACCC ATAGAGAGGA TTACAACAGT ACTCTCCGGG

1401 TGGTCAGTGC CCTCCCCATC CAGCACCAGG ACTGGATGAG TGGCAAGGCT

1451 TTCGCATGCG CCGTCAACAA CAAAGACCTC CCAGCGCCCA TCGAGAGAAC

1501 CATCTCAAAA CCCAAAGGTG AGAGCTGCAG CCTGACTGCA TGGGGGCTGG

1551 GATGGGCATA AGGATAAAGG TCTGTGTGGA CAGCCTTCTG CTTCAGCCAT

1601 GACCTTTGTG TATGTTTCTA CCCTCACAGG GTCAGTAAGA GCTCCACAGG

1651 TATATGTCTT GCCTCCACCA GAAGAAGAGA TGACTAAGAA ACAGGTCACT

1701 CTGACCTGCA TGGTCACAGA CTTCATGCCT GAAGACATTT ACGTGGAGTG

1751 GACCAACAAC GGGAAAACAG AGCTAAACTA CAAGAACACT GAACCAGTCC

1801 TGGACTCTGA TGGTTCTTAC TTCATGTACA GCAAGCTGAG AGTGGAAAAG

1851 AAGAACTGGG TGGAAAGAAA TAGCTACTCC TGTTCAGTGG TCCACGAGGG

1901 TCTGCACAAT CACCACACGA CTAAGAGCTT CTCCCGGACT CCGGGTAAAT

1951 GAGCTCAGCA CCCACAAAAC TCTCAGGTCC AAAGAGACAC CCACACTCAT

2001 CTCCATGCTT CCCTTGTATA AATAAAGCAC CCAGCAATGC CTGGGACCAT

2051 GTAATAG

Figure 1B

Murine Soluble RAGE_FC

```
1    MPAGTAARAW VLVLALWGAV AGGQNITARI GEPLVLSCKG APKKPPQQLE
51   WKLNTGRTEA WKVLSPQGGP WDSVAQILPN GSLLLPATGI VDEGTFRCRA
101  TNRRGKEVKS NYRVRVYQIP GKPEIVDPAS ELTASVPNKV GTCVSEGSYP
151  AGTLSWHLDG KLLIPDGKET LVKEETRRHP ETGLFTLRSE LTVIPTQGGT
201  THPTFSCSFS LGLPRRRPLN TAPIQLRVRE PGPPEGIQLL VEPEGGIVAP
251  GGTVTLTCAI SAQPPPQVHW IKDGAPLPLA PSPVLLLPEV GHADEGTYSC
301  VATHPSHGPQ ESPPVSIRVT ETGDEGPAEG SVGESGLGTL ALA
```

Figure 2A:

Murine solTNFRII_FC

```
   1  ATGGCGCCCG CCGCCCTCTG GGTCGCGCTG GTCTTCGAAC TGCAGCTGTG
  51  GGCCACCGGG CACACAGTGC CCGCCCAGGT TGTCTTGACA CCCTACAAAC
 101  CGGAACCTGG GTACGAGTGC CAGATCTCAC AGGAATACTA TGACAGGAAG
 151  GCTCAGATGT GCTGTGCTAA GTGTCCTCCT GGCCAATATG TGAAACATTT
 201  CTGCAACAAG ACCTCGGACA CTGTGTGTGC GGACTGTGAG GCAAGCATGT
 251  ATACCCAGGT CTGGAACCAG TTTCGTACAT GTTTGAGCTG CAGTTCTTCC
 301  TGTAGCACTG ACCAGGTGGA GACCCGCGCC TGCACTAAAC AGCAGAACCG
 351  AGTGTGTGCT TGCGAAGCTG GCAGGTACTG CGCCTTGAAA ACCCATTCTG
 401  GCAGCTGTCG ACAGTGCATG AGGCTGAGCA AGTGCGGCCC TGGCTTCGGA
 451  GTGGCCAGTT CAAGAGCCCC AAATGGAAAT GTGCTATGCA AGGCCTGTGC
 501  CCCAGGGACG TTCTCTGACA CCACATCATC CACAGATGTG TGCAGGCCCC
 551  ACCGCATCTG TAGCATCCTG GCTATTCCCG GAAATGCAAG CACAGATGCA
 601  GTCTGTGCGC CCGAGTCCCC AACTCTAAGT GCCATCCCAA GGACACTCTA
 651  CGTATCTCAG CCAGAGCCCA CAAGATCCCA ACCCCTGGAT CAAGAGCCAG
 701  GGCCCAGCCA AACTCCAAGC ATCCTTACAT CGTTGGGTTC AACCCCCATT
 751  ATTGAACAAA GTACCAAGGG TGGCGAGCCC CGCGGACCGA CAATCAAGCC
 801  CTGTCCTCCA TGCAAATGCC CAGGTAAGTC ACTAGACCAG AGCTCCACTC
 851  CCGGGAGAAT GGTAAGTGCT ATAAACATCC CTGCACTAGA GGATAAGCCA
 901  TGTACAGATC CATTTCCATC TCTCCTCATC AGCACCTAAC CTCGAGGGTG
 951  GACCATCCGT CTTCATCTTC CCTCCAAAGA TCAAGGATGT ACTCATGATC
1001  TCCCTGAGCC CCATAGTCAC ATGTGTGGTG GTGGATGTGA GCGAGGATGA
1051  CCCAGATGTC CAGATCAGCT GGTTTGTGAA CAACGTGGAA GTACACACAG
```

Figure 2A Continued

1101 CTCAGACACA AACCCATAGA GAGGATTACA ACAGTACTCT CCGGGTGGTC

1151 AGTGCCCTCC CCATCCAGCA CCAGGACTGG ATGAGTGGCA AGGCTTTCGC

1201 ATGCGCCGTC AACAACAAAG ACCTCCCAGC GCCCATCGAG AGAACCATCT

1251 CAAAACCCAA AGGTGAGAGC TGCAGCCTGA CTGCATGGGG GCTGGGATGG

1301 GCATAAGGAT AAAGGTCTGT GTGGACAGCC TTCTGCTTCA GCCATGACCT

1351 TTGTGTATGT TTCTACCCTC ACAGGGTCAG TAAGAGCTCC ACAGGTATAT

1401 GTCTTGCCTC CACCAGAAGA AGAGATGACT AAGAAACAGG TCACTCTGAC

1451 CTGCATGGTC ACAGACTTCA TGCCTGAAGA CATTTACGTG GAGTGGACCA

1501 ACAACGGGAA AACAGAGCTA AACTACAAGA ACACTGAACC AGTCCTGGAC

1551 TCTGATGGTT CTTACTTCAT GTACAGCAAG CTGAGAGTGG AAAAGAAGAA

1601 CTGGGTGGAA AGAAATAGCT ACTCCTGTTC AGTGGTCCAC GAGGGTCTGC

1651 ACAATCACCA CACGACTAAG AGCTTCTCCC GGACTCCGGG TAAATGAGCT

1701 CAGCACCCAC AAAACTCTCA GGTCCAAAGA GACACCCACA CTCATCTCCA

1751 TGCTTCCCTT GTATAAATAA AGCACCCAGC AATGCCTGGG ACCATGTAAT

1801 AGGAATTATC

Figure 2B

murine solTNFRII_FC

```
MAPAALWVAL VFELQLWATG HTVPAQVVLT PYKPEPGYEC QISQEYYDRK 51
AQMCCAKCPP GQYVKHFCNK TSDTVCADCE ASMYTQVWNQ FRTCLSCSSS 101
CSTDQVETRA CTKQQNRVCA CEAGRYCALK THSGSCRQCM RLSKCGPGFG 151
VASSRAPNGN VLCKACAPGT FSDTTSSTDV CRPHRICSIL AIPGNASTDA 201
VCAPESPTLS AIPRTLYVSQ PEPTRSQPLD QEPGPSQTPS ILTSLGSTPI 251
IEQSTKGG
```

Figure 3A

An example of a Human RAGE-LBE fused to an Fc element (amino acid sequence)

MAAGTAVGAWVLVLSLWGAVVGAQNITARIGEPLVLKC
KGAPKKPPQRLEWKLNTGRTEAWKVLSPQGGGPWDSVA
RVLPNGSLFLPAVGIQDEGIFRCQAMNRNGKETKSNYRV
RVYQIPEKPEIVDSASELTAGVPNKVGTCVSEGSYPAGTL
SWHLDGKPLVLNEKGVSVKEQTRRHPETGLFTLQSELMV
TPARGGDPRPTFSCSFSPGLPRHRALRTAPIQPRVWEPVPL
EEVQLVVEPEGGAVAPGGTVTLTCEVPAQPSPQIHWMKD
GVPLPLPPSPVLILPEIGPQDQGTYSCVATHSSHGPQESRA
VSISIIEPGEEGPTAGSVGGSGLGTLALACAGSGSGSGEPK
SCDKTHTCPPCPAPEALGAPSVFLFPDKPKDTLMISRTPE
VTCVVVDVSHEDPEVKFNWYVDGVEXQNAKTKPREEQY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPS
DIAVEWESNGQPENKCKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK **Stop**

Figure 3B

An example of a Human RAGE-LBE fused to an Fc element (nucleic acid sequence)

atggcagccg gaacagcagt tggagcctgg gtgctggtcc tcagtctgtg
gggggcagta gtaggtgctc aaaacatcac agcccggatt ggcgagccac
tggtgctgaa gtgtaagggg gcccccaaga aaccacccca gcggctggaa
tggaaactga acacaggccg gacagaagct tggaaggtcc tgtctcccca
gggaggaggc ccctgggaca gtgtggctcg tgtccttccc aacggctccc
tcttccttcc ggctgtcggg atccaggatg aggggatttt ccggtgccag
gcaatgaaca ggaatggaaa ggagaccaag tccaactacc gagtccgtgt
ctaccagatt cctgagaagc cagaaattgt agattctgcc tctgaactca
cggctggtgt tcccaataag gtggggacat gtgtgtcaga gggaagctac
cctgcaggga ctcttagctg gcacttggat gggaagcccc tggtgctgaa
tgagaaggga gtatctgtga aggaacagac caggagacac cctgagacag
ggctcttcac actgcagtcg gagctaatgg tgaccccagc ccggggagga
gatccccgtc ccaccttctc ctgtagcttc agcccaggcc ttccccgaca
ccgggccttg cgcacagccc ccatccagcc ccgtgtctgg gagcctgtgc
ctctggagga ggtccaattg gtggtggagc cagaaggtgg agcagtagct
cctggtggaa ccgtaaccct gacctgtgaa gtccctgccc agccctctcc
tcaaatccac tggatgaagg atggtgtgcc cttgcccctt ccccccagcc
ctgtgctgat cctccctgag atagggcctc aggaccaggg aacctacagc
tgtgtggcca cccattccag ccacgggccc caggaaagcc gtgctgtcag
catcagcatc atcgaaccag gcgaggaggg gccaactgca ggctctgtgg
gaggatcagg gctgggaact ctagccctgg cctgcgcagg tagcggctcc
ggaagtgggg agcccaaatc ttgtgacaaa actcacacat gcccaccgtg

Figure 3B Continued

cccagcacct gaagccctgg gggcaccgtc agtcttcctc ttccccgaca
aacccaagga caccctcatg atctcccgga cccctgaggt cacatgcgtg
gtggtggacg tgagccacga agaccctgag gtcaagttca actggtacgt
ggacggcgtg gaggigcaga atgccaagac aaagccgcgg gaggagcagt
acaacagcac gtaccgtgtg gtcagcgtcc tcaccgtcct gcaccaggac
tggctgaatg gcaaggagta caagtgcaag gtctccaaca aagccctccc
agcccccatc gagaaaacca tctccaaagc caaagggcag ccccgagaac
cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag
gtcagcctga cctgcctggt caaaggcttc tatcccagcg acatcgccgt
ggagtgggag agcaatgggc agccggagaa caagtgcaag accacgcctc
ccgtgctgga ctccgacggc tccttcttcc tctatagcaa gctcaccgtg
gacaagagca ggtggcagca ggggaacgtc ttctcatgct ccgtgatgca
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gtaaatgagt g

mSolRAGE-Fc Decreases Paw Scores

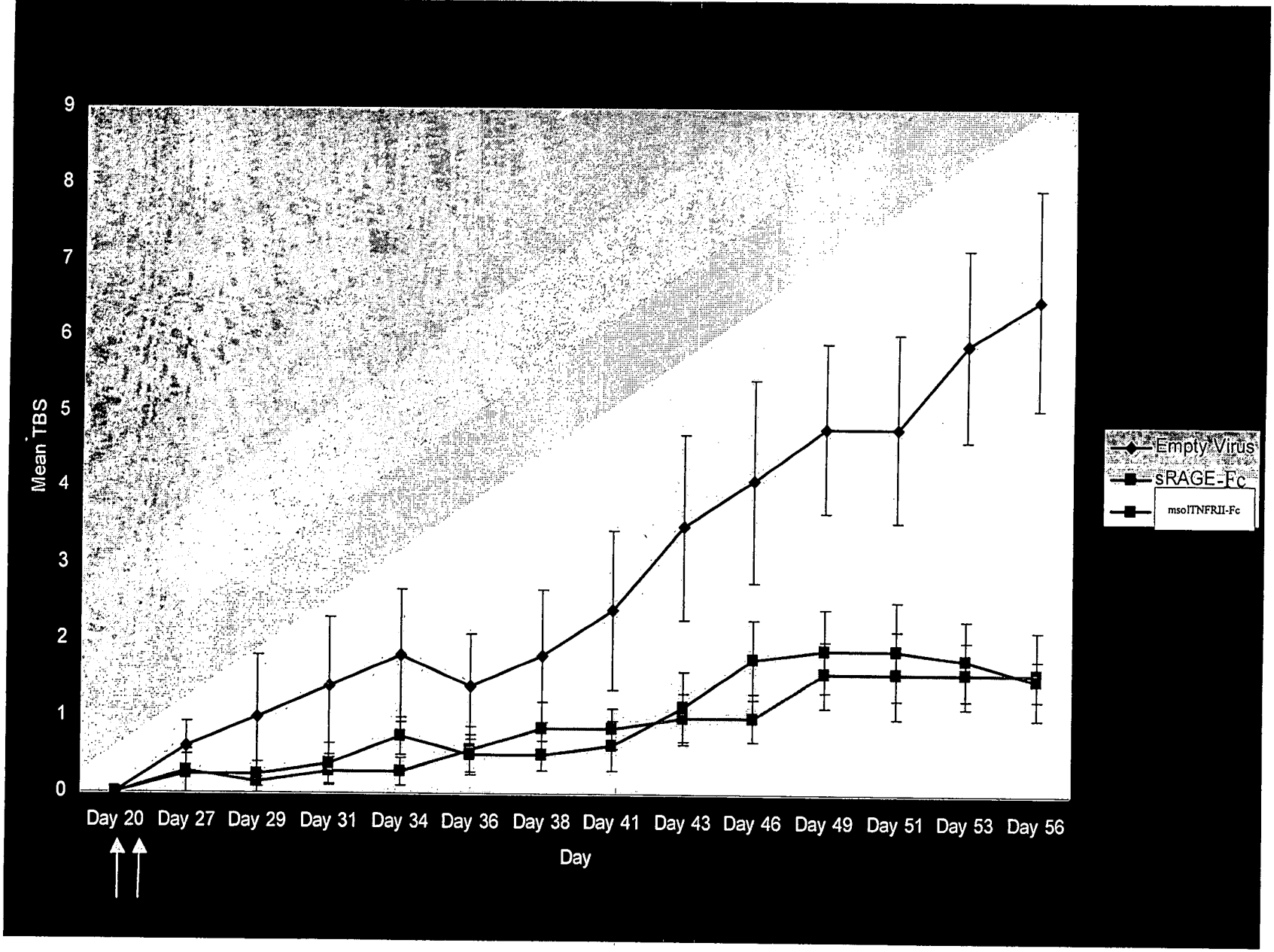
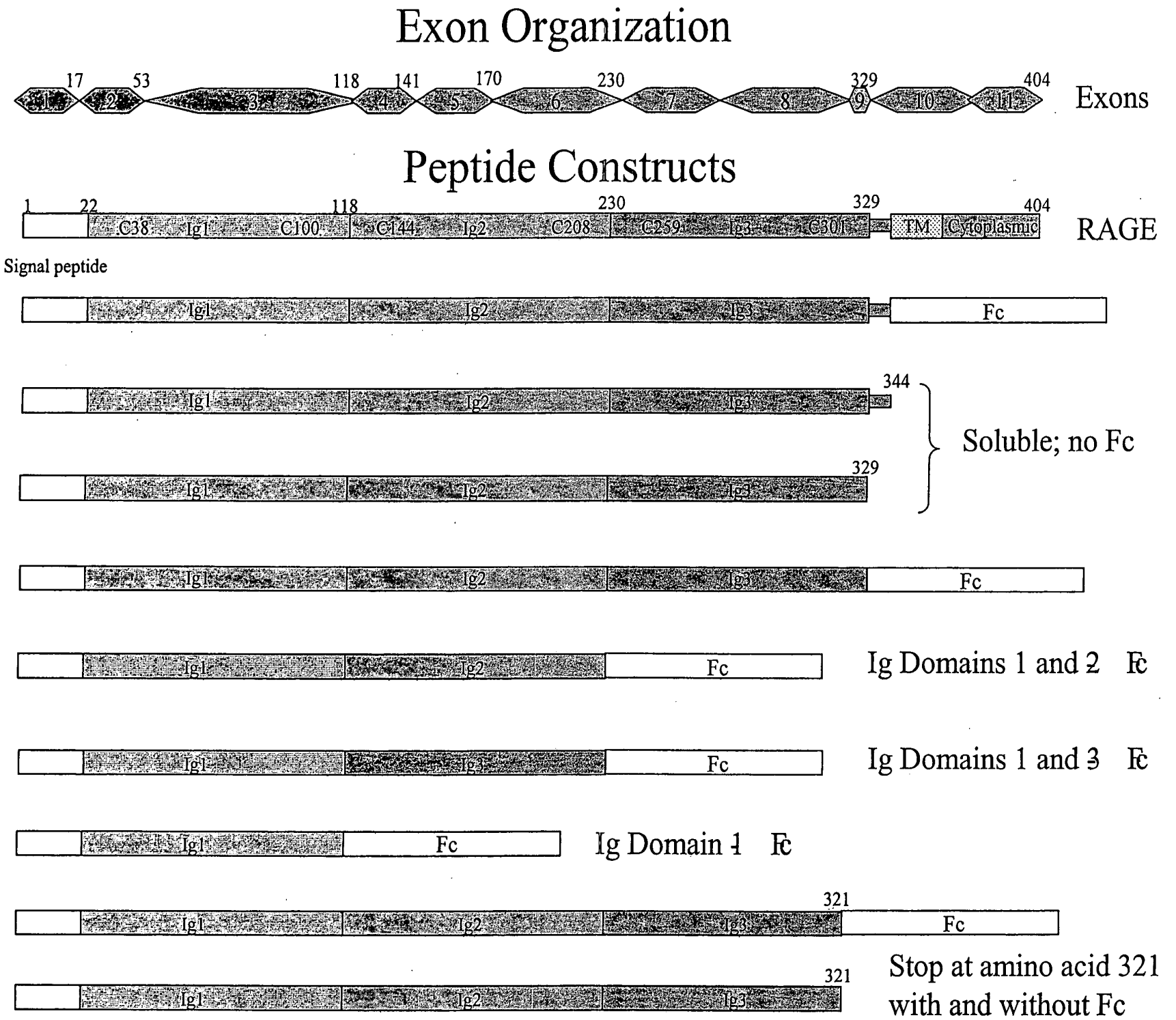


Figure 4


Exon Organization
17
53
118
141
170
230
329
404
1
2
3
4
5
6
7
8
9
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Exons
Peptide Constructs
1
22
118
230
329
404
C38
Ig1
C100
C144
Ig2
C208
C259
Ig3
C301
TM
Cytoplasmic
RAGE
Signal peptide
Fc
344
Soluble; no Fc
329
Ig Domains 1 and 2 Fc
Ig Domains 1 and 3 Fc
Ig Domain 1 Fc
321
Stop at amino acid 321
with and without Fc

Figure 5

Figure 6

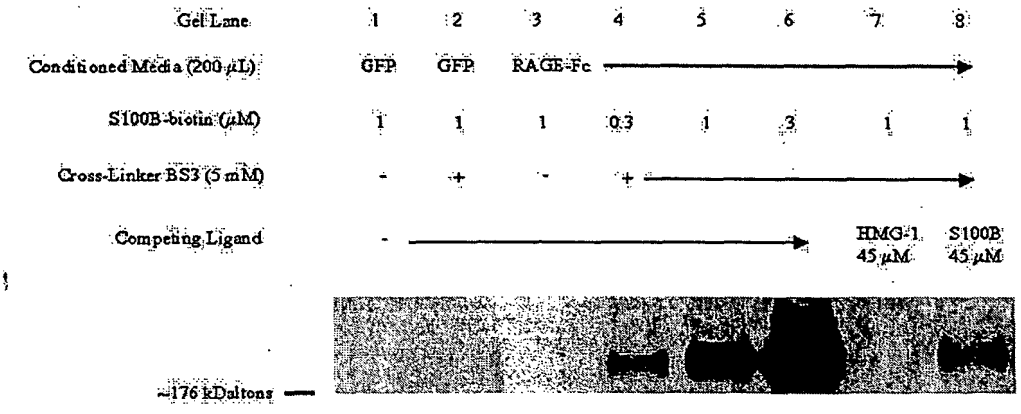
Gel Lane
1
2
3
4
5
6
7
8
Conditioned Media (200 µL)
GFP
GFP
RAGE-Fc
S100B-biotin (µM)
1
1
1
0.3
1
3
1
1
Cross-Linker BS3 (5 mM)
-
+
-
+
Competing Ligand
-
HMG-1 45 µM
S100B 45 µM
~176 kDaltons

Figure 7

Human RAGE amino acid sequence (full length precursor sequence)

```
  1 maagtavgaw vlvlslwgav vgaqnitari geplvlkckg apkkppqrle wklntgrtea
 61 wkvlspqggg pwdsvarvlp ngslflpavg iqdegifrcq amnrngketk snyrvrvyqi
121 pgkpeivdsa seltagvpnk vgtcvsegsy pagtlswhld gkplvpnekg vsvkeqtrrh
181 petglftlqs elmvtpargg dprptfscsf spglprhral rtapiqprvw epvpleevql
241 vvepeggava pggtvtltce vpaqpspqih wmkdgvplpl ppspvlilpe igpqdqgtys
301 cvathsshgp qesravsisi iepgeegpta gsvggsglgt lalalgilgg lgtaalligv
361 ilwqrrqrrg eerkapenqe eeeeraelnq seepeagess tggp
```

Figure 8

Human RAGE nucleic acid cDNA sequence

```
1 gtccctggaa ggaagcagga tggcagccgg aacagcagtt ggagcctggg tgctggtcct
61 cagtctgtgg ggggcagtag taggtgctca aaacatcaca gcccggattg gcgagccact
121 ggtgctgaag tgtaaggggg cccccaagaa accaccccag cggctggaat ggaaactgaa
181 cacaggccgg acagaagctt ggaaggtcct gtctccccag ggaggaggcc cctgggacag
241 tgtggctcgt gtccttccca acggctccct cttccttccg gctgtcggga tccaggatga
301 ggggattttc cggtgccagg caatgaacag gaatggaaag gagaccaagt ccaactaccg
361 agtccgtgtc taccagattc ctgggaagcc agaaattgta gattctgcct ctgaactcac
421 ggctggtgtt cccaataagg tggggacatg tgtgtcagag ggaagctacc ctgcagggac
481 tcttagctgg cacttggatg ggaagccccc ggtgcctaat gagaagggag tatctgtgaa
541 ggaacagacc aggagacacc ctgagacagg gctcttcaca ctgcagtcgg agctaatggt
601 gaccccagcc cggggaggag atccccgtcc caccttctcc tgtagcttca gcccaggcct
661 tccccgacac cgggccttgc gcacagcccc catccagccc cgtgtctggg agcctgtgcc
721 tctggaggag gtccaattgg tggtggagcc agaaggtgga gcagtagctc ctggtggaac
781 cgtaaccctg acctgtgaag tccctgccca gccctctcct caaatccact ggatgaagga
841 tggtgtgccc ttgccccttc cccccagccc tgtgctgatc ctccctgaga tagggcctca
901 ggaccaggga acctacagct gtgtggccac ccattccagc cacgggcccc aggaaagccg
961 tgctgtcagc atcagcatca tcgaaccagg cgaggagggg ccaactgcag gctctgtggg
1021 aggatcaggg ctgggaactc tagccctggc cctggggatc ctgggaggcc tggggacagc
1081 cgccctgctc attggggtca tcttgtggca aaggcggcaa cgccgaggag aggagaggaa
1141 ggccccagaa aaccaggagg aagaggagga gcgtgcagaa ctgaatcagt cggaggaacc
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1261 cagctccctt ttctttttcc cttgaactgt tctggcctca gaccaactct ctcctgtata
1321 atctctctcc tgtataaccc caccttgcca agctttcttc tacaaccaga gcccccacaa
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```

RAGE-LBE-Fc is Secreted by CHO Cells

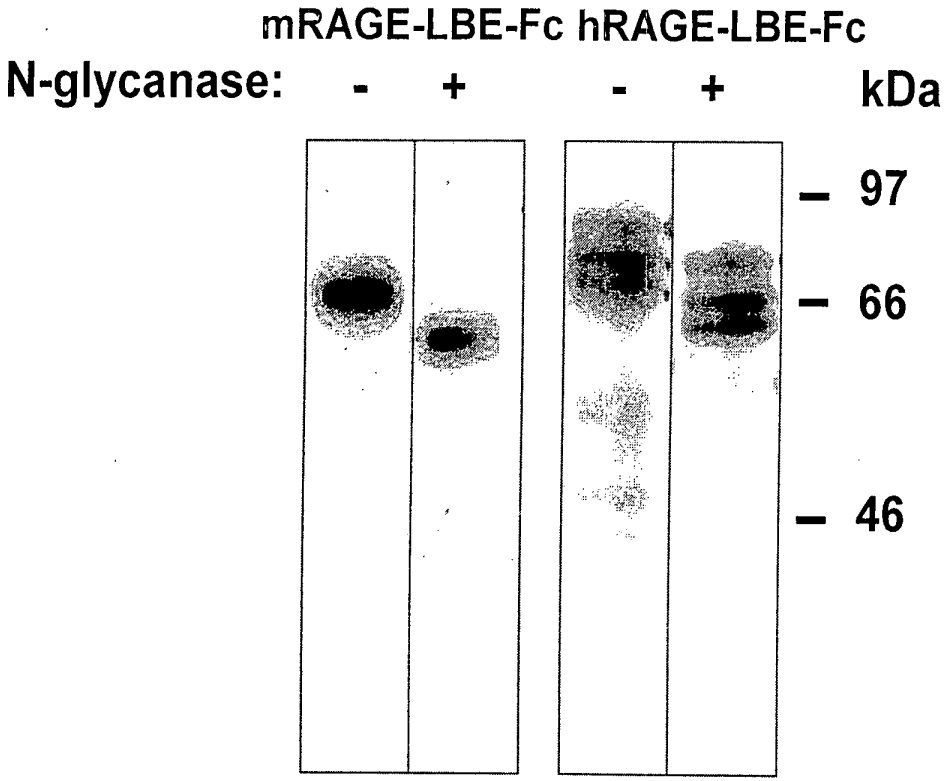

Figure 9

N-terminal Human RAGE Sequence

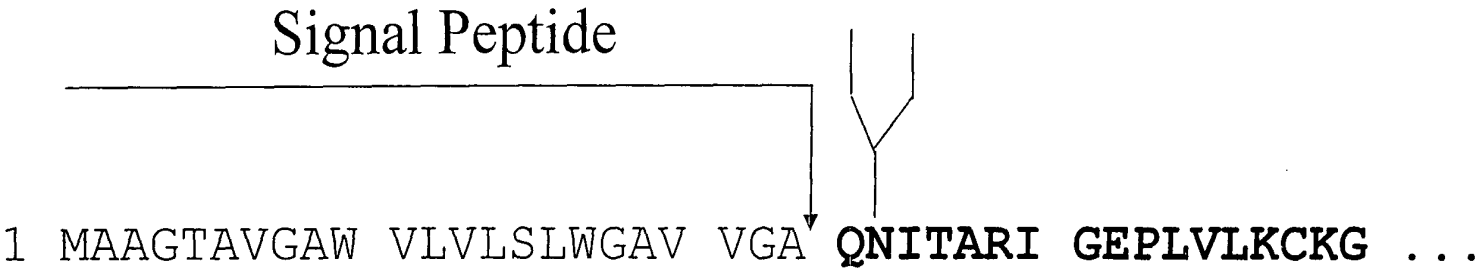

Figure 10